

CHAMBRE DES REPRÉSENTANTS
DE BELGIQUE

BELGISCHE KAMER VAN
VOLKSVERTEGENWOORDIGERS

16 novembre 2022

16 november 2022

**LE RETOUR SUR INVESTISSEMENT
DES FINANCEMENTS PUBLICS
DANS LE CADRE
DE LA TRANSITION ÉNERGÉTIQUE**

**DE RETURN ON INVESTEMENT
VAN DE OVERHEIDSFINANCIERING
IN HET KADER
VAN DE ENERGIETRANSITIE**

Auditions

Hoorzittingen

**Compte-rendu numérique des réunions
de la commission de l'Énergie,
de l'Environnement et du Climat
(art. 32 Rgt. *juncto* art. 178bis Rgt.)**

**Digitaal verslag van de vergaderingen
van de commissie voor Energie,
Leefmilieu en Klimaat
(art. 32 Rgt. *juncto* art. 178bis Rgt.)**

**Composition de la commission à la date de dépôt du rapport/
Samenstelling van de commissie op de datum van indiening van het verslag**
Président/Voorzitter: Christian Leysen

A. — Titulaires / Vaste leden:

N-VA	Wouter Raskin, Yoleen Van Camp, Bert Wollants
Ecolo-Groen PS	Séverine de Laveleye, Kim Buyst, Barbara Creemers Malik Ben Achour, Mélissa Hanus, Daniel Senesael
VB	Kurt Ravyts, Reccino Van Lommel
MR	Mathieu Bihet, Marie-Christine Marghem
cd&v	Nawal Farih
PVDA-PTB	Thierry Warmoes
Open Vld	Christian Leysen
Vooruit	Kris Verduyck

B. — Suppléants / Plaatsvervangers:

Sigrid Goethals, Tomas Roggeman, Anneleen Van Bossuyt, Kristien Van Vaerenbergh
Julie Chanson, Samuel Cogolati, Wouter De Vriendt, Albert Vicaire
Chanelle Bonaventure, Christophe Lacroix, Patrick Prévot, Laurence Zanchetta
Ortwin Depoortere, Nathalie Dewulf, Erik Gilissen
Michel De Maegd, Philippe Goffin, Benoît Piedboeuf
Jan Briers, Leen Dierick
Greet Daems, Raoul Hedeboom
Marianne Verhaert, Kathleen Verhelst
Vicky Reynaert, Joris Vandenbroucke

C. — Membre sans voix délibérative / Niet-stemgerechtigd lid:

Les Engagés	Georges Dallemagne
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N-VA	: Nieuw-Vlaamse Alliantie
Ecolo-Groen	: Ecologistes Confédérés pour l'organisation de luttes originales – Groen
PS	: Parti Socialiste
VB	: Vlaams Belang
MR	: Mouvement Réformateur
cd&v	: Christen-Democratisch en Vlaams
PVDA-PTB	: Partij van de Arbeid van België – Parti du Travail de Belgique
Open Vld	: Open Vlaamse liberalen en democraten
Vooruit	: Vooruit
Les Engagés	: Les Engagés
DéFI	: Démocrate Fédéraliste Indépendant
INDEP-ONAFH	: Indépendant - Onafhankelijk

Abréviations dans la numérotation des publications:		Afkorting bij de nummering van de publicaties:	
DOC 55 0000/000	Document de la 55 ^e législature, suivi du numéro de base et numéro de suivi	DOC 55 0000/000	Parlementair document van de 55 ^e zittingsperiode + basisnummer en volgnummer
QRVA	Questions et Réponses écrites	QRVA	Schriftelijke Vragen en Antwoorden
CRIV	Version provisoire du Compte Rendu Intégral	CRIV	Voorlopige versie van het Integraal Verslag
CRABV	Compte Rendu Analytique	CRABV	Beknopt Verslag
CRIV	Compte Rendu Intégral, avec, à gauche, le compte rendu intégral et, à droite, le compte rendu analytique traduit des interventions (avec les annexes)	CRIV	Integraal Verslag, met links het definitieve integraal verslag en rechts het vertaalde beknopt verslag van de toespraken (met de bijlagen)
PLEN	Séance plénière	PLEN	Plenum
COM	Réunion de commission	COM	Commissievergadering
MOT	Motions déposées en conclusion d'interpellations (papier beige)	MOT	Moties tot besluit van interpellaties (beigekleurig papier)

Lors de sa réunion du 25 octobre 2022, la commission de l'Énergie, de l'Environnement et du Climat a tenu une audition sur le "Rapport spécial 09/2022 de la Cour des comptes européenne: dépenses climatiques du budget 2014-2020 de l'UE – Une réalité en deçà des chiffres publiés"¹, avec Mme Annemie Turtelboom, Doyenne de la Chambre II de la Cour des comptes européenne.

Le compte-rendu numérique (art. 32 Rgt. *juncto* art. 178bis Rgt.) de cette audition peut être consulté sur le site web de la Chambre:

<https://www.lachambre.be/media/index.html?language=fr&sid=55U3305>

Annexe:

Présentation de Mme Annemie Turtelboom.

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* *

Lors de sa réunion du 8 novembre 2022, la commission de l'Énergie, de l'Environnement et du Climat a tenu une audition sur "Le retour sur investissement des subsides dans la transition énergétique, en ce qui concerne les compétences européennes et fédérales", avec:

— M. Kris Peeters, vice-président de la Banque européenne d'Investissement;

— MM. Koen Locquet et Laurent Jacquet, représentants de la CREG;

— Prof. Dr. Sebastian Oberthür, *Director of the Research Centre for Environment, Economy and Energy, and Professor for Environment and Sustainable Development at the Brussels School of Governance*;

— M. Vincent Van Steenberghe, représentant du Service Changements climatiques du SPF Santé publique, Sécurité de la Chaîne alimentaire et Environnement;

— Mme Nancy Mahieu et M. Lenhard Vanhoorn, représentants de la DG Énergie du SPF Économie, PME, Classes moyennes et Énergie.

Le compte-rendu numérique (art. 32 Rgt. *juncto* art. 178bis Rgt.) de cette audition peut être consulté sur le site web de la Chambre:

<https://www.lachambre.be/media/index.html?language=fr&sid=55U3340>.

¹ https://www.eca.europa.eu/Lists/ECADocuments/SR22_09/SR_Climate-mainstreaming_FR.pdf

Tijdens haar vergadering van 25 oktober 2022 heeft de commissie voor Energie, Leefmilieu en Klimaat over het "Speciaal verslag 09/2022 van de Europese Rekenkamer: klimaatuitgaven in de EU-begroting 2014-2020: niet zo hoog als gerapporteerd"¹ een hoorzitting gehouden met mevrouw Annemie Turtelboom, Deken van Kamer II van de Europese Rekenkamer.

Het digitaal verslag (art. 32 Rgt. *juncto* art. 178bis Rgt.) van deze hoorzitting kan worden geraadpleegd op de website van de Kamer:

<https://www.dekamer.be/media/index.html?language=nl&sid=55U3305>

Bijlage:

Presentatie van mevrouw Annemie Turtelboom.

*
* *

Tijdens haar vergadering van 8 november 2022 heeft de commissie voor Energie, Leefmilieu en Klimaat een hoorzitting gehouden over "De return on investment van subsidies in de energietransitie, voor wat de Europese en federale bevoegdheden betreft" met:

— de heer Kris Peeters, vicepresident van de Europese Investeringsbank;

— de heren Koen Locquet en Laurent Jacquet, vertegenwoordigers van de CREG;

— Prof. Dr. Sebastian Oberthür, *Director of the Research Centre for Environment, Economy and Energy, and Professor for Environment and Sustainable Development at the Brussels School of Governance*;

— de heer Vincent Van Steenberghe, vertegenwoordiger van de Dienst Klimaatverandering van de FOD Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu;

— mevrouw Nancy Mahieu en de heer Lenhard Vanhoorn, vertegenwoordigers van de AD Energie van de FOD Economie, kmo, Middenstand en Energie.

Het digitaal verslag (art. 32 Rgt. *juncto* art. 178bis Rgt.) van deze hoorzitting kan worden geraadpleegd op de website van de Kamer:

<https://www.dekamer.be/media/index.html?language=nl&sid=55U3340>.

¹ https://www.eca.europa.eu/Lists/ECADocuments/SR22_09/SR_Climate-mainstreaming_NL.pdf

Annexes:

Présentation de M. Kris Peeters;

List of Energy projects financed by the EIB in Belgium
(transmise par M. Kris Peeters);

Présentation de MM. Koen Locquet et Laurent Jacquet;

Présentation du Prof. Dr. Sebastian Oberthür;

Texte de l'exposé du Prof. Dr. Sebastian Oberthür;

Présentation de M. Vincent Van Steenberghe;

Présentation de Mme Nancy Mahieu et M. Lenhard Vanhoorn.

Bijlagen:

Presentatie van de heer Kris Peeters;

List of Energy projects financed by the EIB in Belgium
(overgemaakt door de heer Kris Peeters);

Presentatie van de heren Koen Locquet en Laurent Jacquet;

Presentatie van Prof. Dr. Sebastian Oberthür;

Tekst van de uiteenzetting van Prof. Dr. Sebastian Oberthür;

Presentatie van de heer Vincent Van Steenberghe;

Presentatie van mevrouw Nancy Mahieu en de heer Lenhard Vanhoorn.

Brussel, Federaal Parlement

Bruxelles, Parlement fédéral, 25/10/2022

Presentatie – SR 09/2022 Présentation – RS 09/2022

Annemie Turtelboom

Lid van de Europese Rekenkamer (ERK) /
Membre de la Cour des comptes européenne
(CdCe)



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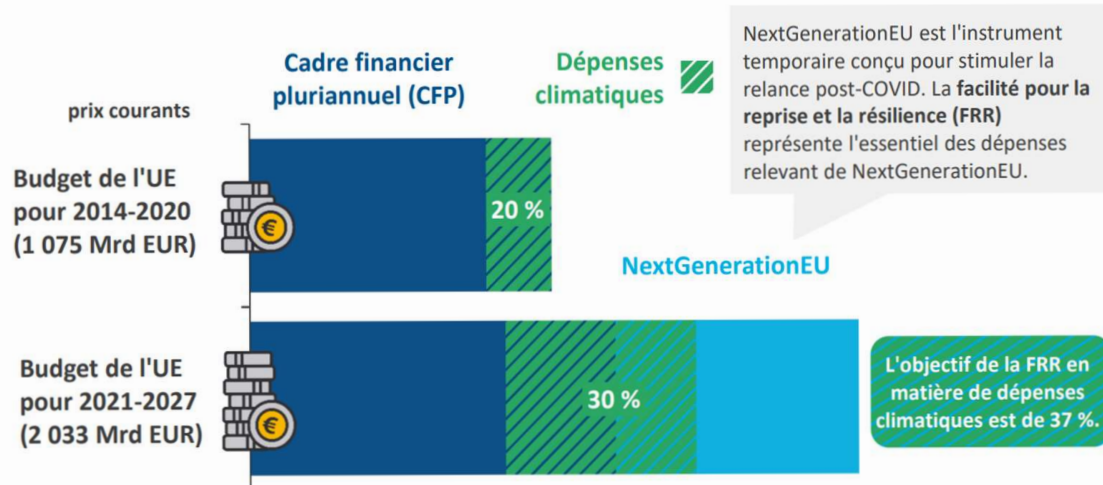
RS 09/2022

Rapport spécial 09/2022 – Dépenses climatiques du budget 2014-2020 de l'UE – Une réalité en deçà des chiffres publiés



Objectifs de l'UE en matière de dépenses climatiques

Figure 3 – Objectifs en matière de dépenses climatiques au titre du budget de l'UE



Source: Cour des comptes européenne, sur la base des documents suivants: Commission européenne, «Un budget moderne pour une Union qui protège, qui donne les moyens d'agir et qui défend – Cadre financier pluriannuel 2021-2027», COM(2018) 321; Conseil européen, Réunion extraordinaire du Conseil européen – Conclusions, EUCO 10/20, 2020, p. 7; Commission européenne, *Guidance to Member States – Recovery and Resilience Plans*, SWD(2020) 205, p. 5.



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Qu'avons-nous examiné?

Nous avons vérifié si la Commission avait communiqué des informations pertinentes et fiables concernant les dépenses climatiques de 2014-2020:

- nous avons examiné comment elle avait appliqué sa méthode d'évaluation des dépenses climatiques;
- nous avons déterminé dans quelle mesure les dépenses déclarées avaient contribué à l'action pour le climat;
- nous avons passé en revue les changements attendus dans le suivi des dépenses consacrées au climat après 2020.



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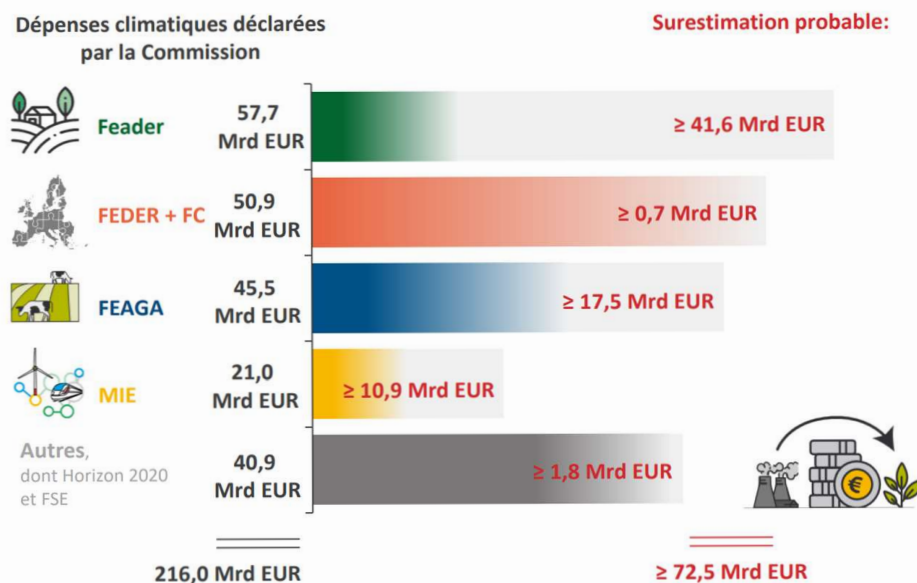




Qu'avons-nous constaté? (1)

1) Les dépenses climatiques du budget 2014-2020 de l'UE étaient en réalité inférieures aux chiffres publiés

Figure 16 – Déclaration, par la Commission, des dépenses climatiques de la période 2014-2020, et surestimations probables



Source: Cour des comptes européenne, sur la base de la méthode appliquée par la Commission.



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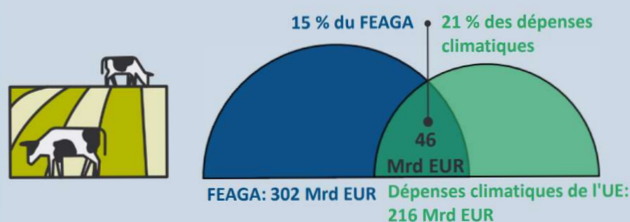


Qu'avons-nous constaté? (2)

2) La moitié des dépenses climatiques déclarées de l'UE concernent l'agriculture, mais les émissions de gaz à effet de serre d'origine agricole n'ont pas diminué depuis 2010 dans l'Union

Encadré 2 – Contribution à la déclaration des dépenses climatiques de 2014-2020: les paiements directs au titre du FEAGA

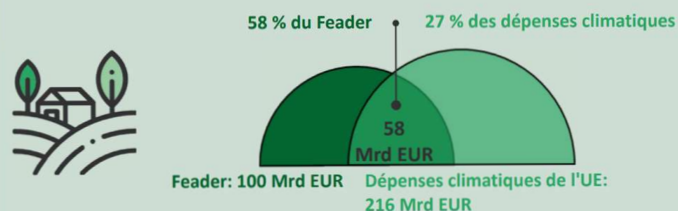
Le **Fonds européen agricole de garantie (FEAGA)** finance les paiements directs de l'UE et les mesures de marché relevant de la politique agricole commune (PAC). Les paiements directs, qui représentent la majeure partie du financement du FEAGA, sont des aides agricoles (liées par exemple à la surface) versées directement aux agriculteurs.



Source: Cour des comptes européenne, sur la base des déclarations de la Commission.

Encadré 3 – Contribution à la déclaration des dépenses climatiques de 2014-2020: le développement rural

Le **Fonds européen agricole pour le développement rural (Feader)** cofinance le développement rural de l'UE au titre de la PAC. Il vise à renforcer la compétitivité des secteurs agricole et forestier, à améliorer l'environnement et la qualité de la vie dans les zones rurales et à promouvoir la diversification de l'économie rurale.



Source: Cour des comptes européenne, sur la base des déclarations de la Commission.



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Wat waren onze bevindingen? (3)

3) De klimaatuitgaven werden inconsistent berekend in het kader van verschillende programma's

Tabel 5 — Beoordeling door de ERK van de bijdrage van de belangrijkste CEF-subsectoren aan klimaatactie

CEF-subsector en toegepaste klimaatcoëfficiënt		Beoordeling door de ERK met gebruikmaking van de methode van de Commissie, en impact op de verslaglegging	
Vervoer: spoor 15,3 miljard EUR			
 De meeste projecten hebben betrekking op de modernisering van de spoorwegen. 100 %	➡ spoorvervoer behoort tot de meest efficiënte vormen van vervoer wat de uitstoot van broeikasgassen betreft^a; ➡ de spoorwegen hebben slechts een bescheiden vermindering van de CO₂-uitstoot gerealiseerd, met name wanneer fossiele brandstoffen nog steeds de elektriciteitsbron vormden^b; ❌ broeikasgasemissies ten gevolge van de aanleg van spoorweginfrastructuur zijn hoger dan voor andere vervoerswijzen: het kan vijf jaar tot meerdere decennia duren voordat de spoorwegen deze emissies hebben gecompenseerd^{a,b}; ❌ aan soortgelijke spoorwegprojecten is in het kader van het cohesiebeleid een klimaatcoëfficiënt van 40 % toegekend^c.	40 % 9,2 miljard EUR waarschijnlijke overschatting	
Energie: elektriciteit 2,8 miljard EUR			
 De projecten hebben voornamelijk betrekking op energieverbindingen en hieraan gerelateerde studies. 100 %	➡ projecten kunnen de integratie van hernieuwbare energiebronnen ondersteunen^d; ➡ elektriciteit houdt niet noodzakelijk een schone energiebron in, aangezien slechts 37 % van de in 2020 in de EU-27 verbruikte elektriciteit werd opgewekt uit hernieuwbare energiebronnen^{d,e}; ❌ aan soortgelijke projecten voor energietransmissie is in het kader van het cohesiebeleid een klimaatcoëfficiënt van 0 % toegekend^f.	40 % 1,7 miljard EUR waarschijnlijke overschatting	



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Wat waren onze bevindingen? (4)

4) In de methode voor het traceren van klimaatuitgaven wordt alleen rekening gehouden met de mogelijke positieve impact op het klimaat

Figuur 9 — Voorbeelden van gefinancierde acties met gunstige of mogelijk schadelijke effecten op het klimaat



Bron: ERK.



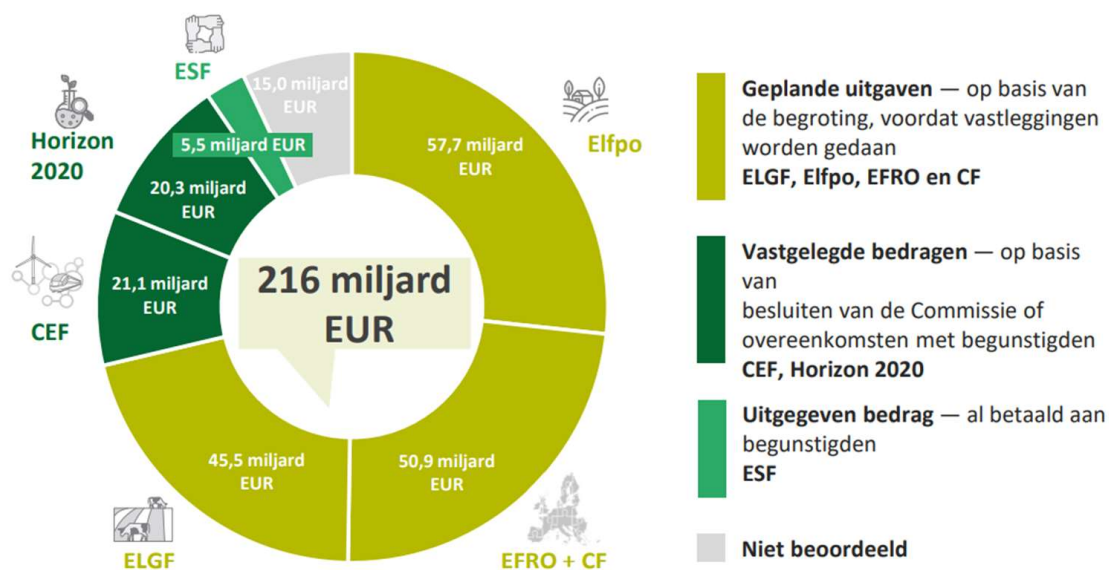
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Wat waren onze bevindingen? (5)

5) Er is geen evaluatie van het soort impact dat de daadwerkelijke uitgaven hadden op de verwezenlijking van de klimaatdoelstellingen van de EU

Figuur 11 — Verschillende grondslagen voor de klimaatverslaglegging van de Commissie



Bron: ERK, op basis van de klimaatverslaglegging van de Commissie.



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Wat waren onze bevindingen?

6) De meeste voor 2014-2020 vastgestelde kwesties zullen waarschijnlijk blijven bestaan

- Op veel beleidsterreinen blijft het traceren van klimaatuitgaven in het kader van het MFK 2021-2027 in wezen hetzelfde als voor de periode 2014-2020.
 - Op andere gebieden heeft de Commissie de klimaatcoëfficiënten voor sommige financieringsprogramma's aangepast of verduidelijkt om ze beter af te stemmen op de werkelijke bijdrage ervan aan het klimaat.
 - Ondanks de voorgestelde verbeteringen in de verslagleggingsmethode blijven de meeste voor 2014-2020 vastgestelde kwesties bestaan.
- ⇒ We verwachten beperkte verbeteringen in de klimaatverslaglegging voor 2021-2027.



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Wat zijn onze aanbevelingen?

Om de toekomstige verslaglegging over klimaatuitgaven te verbeteren, bevelen wij de Commissie het volgende aan:

- Onderbouw de klimaatrelevantie van landbouwfinanciering
- Verbeter de klimaatverslaglegging, bijvoorbeeld door het identificeren van EU-uitgaven met een mogelijk negatieve impact op het klimaat
- Verstrek richtsnoeren om de consistentie te waarborgen



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Produits de la Cour consacrés à des thèmes liés au climat

Publiés:

- **RS 02/2022** – Efficacité énergétique dans les entreprises
- **Analyse 01/2022** – Taxation de l'énergie, tarification du carbone et subventions à l'énergie
- **RS 22/2021** – Finance durable
- **RS 21/2021** – Financement de l'UE en faveur de la biodiversité et de la lutte contre le changement climatique dans ses forêts
- **RS 16/2021** – Politique agricole commune et climat
- **RS 12/2021** – Principe du pollueur-payeur
- **RS 05/2021** – Infrastructures de recharge pour véhicules électriques
- **Analyse 01/2020** – Suivi des dépenses liées à l'action pour le climat dans le budget de l'UE
- **RS 11/2020** – Efficacité énergétique des bâtiments
- **RS 08/2019** – Énergie éolienne et solaire destinée à la production d'électricité

A venir:

- **RS** – Les régions charbonnières en transition (9 novembre 2022)
- **RS** – Objectifs climatiques (Q1/2023)
- **RS** – Biocarburants durables (Q4/2023)





Q&A

**Hartelijk dank
voor uw aandacht. /
Je vous remercie
de votre attention.**

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EIB GROUP

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THE EIB GROUP



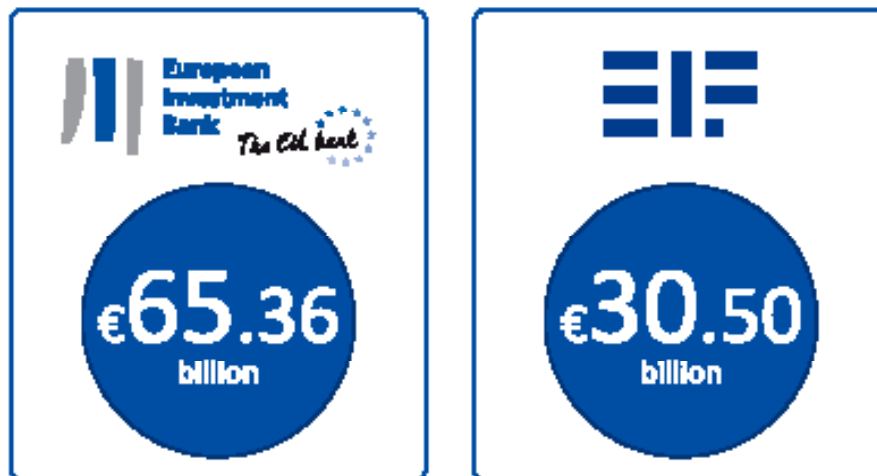
The lending arm of
the European Union since 1958



Specialist provider of risk finance to small
and medium-sized enterprises



EIB GROUP FINANCING IN 2021



OUR PRIORITIES



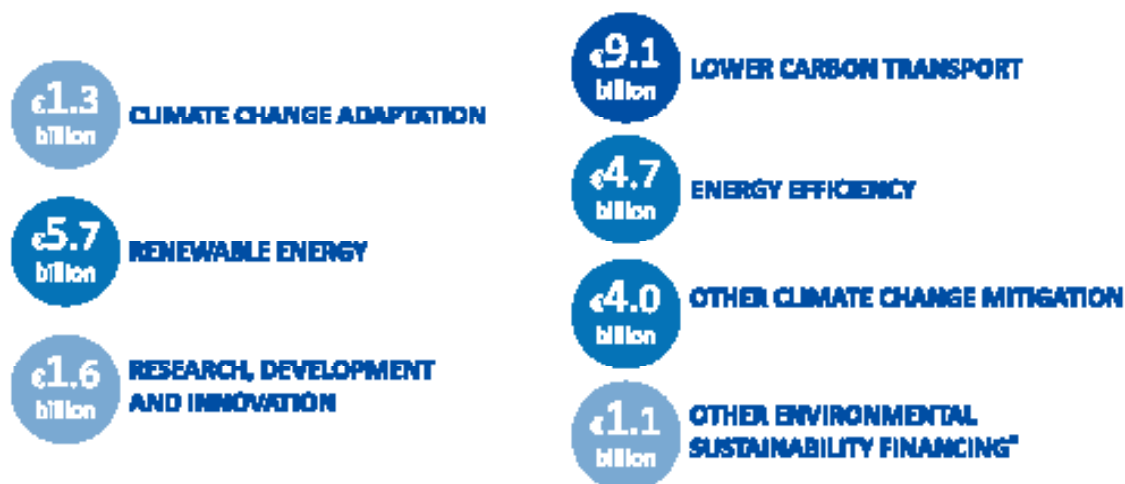
EIB PRODUCTS CATALYSE INVESTMENT



GOALS to 2030: THE CRITICAL DECADE



GREEN INVESTMENTS 27.6 BILLION IN 2021



* Total deal benefit contributing to both climate action and environmental sustainability objectives reached 0.5 billion.



ENERGY LENDING POLICY

- Stop supporting traditional fossil fuels.
- Innovation in energy efficiency and renewable energy.
- More wind and solar power, as well as cross-border electricity connections.
- Advances in energy storage, electric vehicles and green transport.
- Improve energy production outside the EU and ensure people have electricity in their homes.



EIB GROUP REPOWEREU PACKAGE

EUR 30bn of financing, mobilizing EUR 115bn

Sustainable
Energy

Energy
Efficiency and
Energy
Transition

Green
Innovation (incl.
low-carbon
hydrogen)



A RESPONSIBLE BANK



We monitor the environmental and social sustainability of all of our investment projects



We appraise all human, technological, or natural resources used by the project



We exclude certain economic activities



We report greenhouse gas emissions from all project with a significant impact

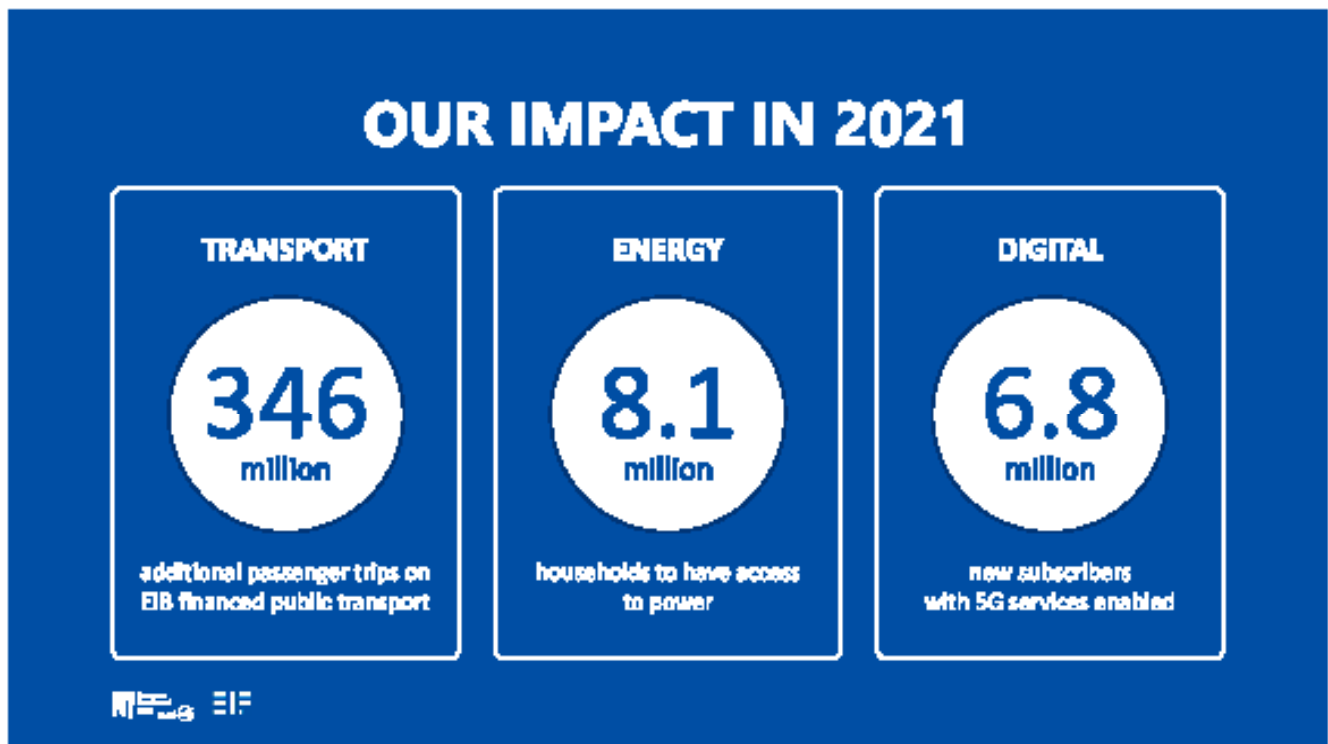


We monitor, report and implement reduction of our own environmental footprint



We ensure strong governance, transparency and accountability for ourselves and our counterparts





Energy projects financed by the EIB in Belgium

TITRE	PAYS	SECTEUR	MONTANT	ÉTAT ACTUEL	DÉTERMINATION DE L'ÉTAT
→ EMBIE GREEN R&D	Belgium, France	Energy	N/A	Under approval	22/07/2022
→ NETHION (E.ON VIO)	Poland, Germany, Belgium, France, Italy	Energy	€12,000,000	Signed	26/07/2022
→ ASTER ROOFTOP SOLAR	Belgium	Energy	N/A	Under approval	24/01/2022
→ FLUVIUS ENERGY TRANSITION INFRA	Belgium	Energy	€350,000,000	Signed	19/12/2021
→ WALLONIA SOC HOUSING EFF & FLOOD RESILIENCE	Belgium	Urban development, Energy, Water, drainage	€1,100,000,000	Signed	01/10/2021
→ FLUVIUS SMART METERS	Belgium	Energy	€200,000,000	Signed	19/12/2021
→ ENHANCED BELGIUM COVID-19 AND CLIMATE SUPPORT	Belgium	Energy, Credit line	N/A	Approved	07/05/2020
→ SEAMADE NV MERMAID & SEASTAR OFFSHORE WIND FARMS	Belgium	Energy	€262,467,377	Signed	25/11/2018
→ NORTHWESTER 2	Belgium	Energy	€210,000,000	Signed	05/10/2018
→ WALLON REGION ENERGY GRID UPGRADE (ORES)	Belgium	Energy	€550,000,000	Signed	01/12/2017
→ ISVAG WASTE-TO-ENERGY PLANT	Belgium	Solid waste, Energy	N/A	Under approval	09/10/2017
→ ELIA - SECURITY OF SUPPLY	Belgium	Energy	€100,000,000	Signed	16/05/2017
→ NORTHER OFFSHORE WIND	Belgium	Energy	€607,901,024	Signed	14/12/2016
→ BELFIUS SMART CITIES CLIMATE & CIRCULAR ECONOMY	Belgium	Industry, Transport, Urban development, Energy, Water, wastewater, Solid waste, Services	€200,000,000	Signed	08/12/2016

→	BELFUS ENERGY EFFICIENCY FLARE-EE	Belgium	Energy, Industry	€75.000.000	Signed	03/10/2016
→	RENTEL OFFSHORE WIND	Belgium	Energy	€300.000.000	Signed	03/10/2016
→	NOBELWIND OFFSHORE WIND	Belgium	Energy	€250.000.000	Signed	21/10/2016
→	NORTHWIND OFFSHORE WIND FORMERLY ELDEPASCO	Belgium	Energy	€333.000.000	Signed	27/06/2017
→	C-Power II Offshore Wind Belgium	Belgium	Energy	€400.000.000	Signed	25/11/2010
→	Develop Belgium Offshore Wind	Belgium	Energy	€300.000.000	Signed	24/07/2009
→	DEXIA Renewable Energy	Belgium, Luxembourg	Energy	€750.000.000	Signed	18/05/2007
→	Fluxys Transmission Grid Upgrade - TEN	Belgium	Energy	€400.000.000	Signed	01/10/2000
→	Benedux Power Generation Project	Belgium, The Netherlands	Energy	€400.000.000	Signed	26/11/2000
→	FLUXYS LNG Terminal TEN	Belgium	Energy	€55.000.000	Signed	01/08/2007
→	ELIA Transmission Network Upgrade	Belgium	Energy	€725.000.000	Signed	19/12/2006
→	ANTWERP POWER PLANT	Belgium	Energy	€70.000.000	Signed	20/10/2000
→	DISTRIGAS TRANSIT REINFORCEMENT (TEN)	Belgium	Energy	€50.500.000	Signed	23/06/1998
→	ELECTRABEL	Belgium	Energy	€180.002.105	Signed	11/12/1996
→	DISTRIGAZ ZEPHIRE	Belgium	Energy	€88.546.280	Signed	22/12/1999
→	ONDRAF DESSEL 1 & 2 (EIB/ED)	Belgium	Energy	€88.291.778	Signed	06/12/1999
→	BELGELICTRIC	Belgium	Energy	€455.037.510	Signed	11/07/1995
→	DISTRIGAZ GAZOOL/DUCZELE LILLO	Belgium	Energy	€29.576.278	Signed	17/10/1990

→	INTERCOM THIRANGE 2	Belgium	Energy	€69,710,000	Signed	22/10/1979
→	EDIS-BOEL	Belgium	Energy	€62,160,000	Signed	13/11/1979
→	SEGE0	Belgium	Energy	LT0,625,464	Signed	27/10/1979
→	SEMO III	Belgium	Energy	LT4,600,000	Signed	31/01/1974
→	SEMO II	Belgium	Energy	LT4,000,000	Signed	24/11/1972
→	SEMO I	Belgium	Energy	LT6,000,000	Signed	28/10/1970

Meer informatie over ieder project is beschikbaar op de EIB website via onderstaande link:

<https://www.eib.org/en/projects/all/index.htm?e=&sortColumn=statusDate&sortDir=desc&pageNumber=0&itemPerPage=25&pageable=true&language=EN&defaultLanguage=EN&Bor=true&yearFrom=1959&yearTo=2022&BorStatus=true&orRegions=true&countries=BE&orCountries=true§ors=1000&orSectors=true>

Audition:

« *Return on investment* du financement public dans le cadre de la transition énergétique »

COMMISSION DE L'ÉNERGIE, DE L'ENVIRONNEMENT ET DU CLIMAT

Koen Locquet - Laurent Jacquet

8 novembre 2022



— **CREG** —

Commission de Régulation de l'Électricité et du Gaz

Investissements relevant des compétences de la CREG

1. Subsidies pour l'énergie éolienne *offshore* en Belgique
2. Incitant à l'innovation pour Elia
3. Incitant liés à la transition énergétique pour Fluxys Belgium et Fluxys LNG
4. Europe : investir davantage dans les énergies renouvelables et l'hydrogène en particulier

— CREG —

2

Subsides pour l'énergie éolienne *offshore* en Belgique



— CREG —

Zone est (2,2 GW)

- 9 parcs *offshore* d'une capacité de 2,2 GW :
 - production 2009-2021 = 35,5 TWh
- Subsidés versés 2009-2021 :
 - achat certificats verts et avances : 3,5 milliards €
 - versement subside câble : 112,6 millions €
- Subside câble de 25 M€
 - versé après présentation d'un programme d'investissement autorisé
 - les subsidés octroyés sont effectivement utilisés pour la production d'énergie renouvelable
- Octroi des certificats verts
 - octroyés par MWh produit : paiement après contrôle par la CREG (mois qui suit la production)
 - les subsidés octroyés sont effectivement utilisés pour la production d'énergie renouvelable

— CREG —

4

Zone Princesse Elisabeth (3,1-3,5 GW) : procédure d'appel d'offres

- Objectif :
 - garantir le niveau le plus haut possible d'injection d'énergies renouvelables au coût le plus bas possible
- Critères d'attribution :
 - prix (minimum 70 % selon les règles pour les aides d'Etat)
 - innovation
 - durabilité
- Objectif : élaborer un AR appel d'offres en 2023 et le notifier à la CE pour les aides d'Etat

— CREG —

5

Incitant à l'innovation pour Elia



— CREG —

Incitant à l'innovation pour Elia

- Innovation de la CREG en 2016 : une partie de la rémunération équitable du GRT dépend désormais d'incitants, l'un d'entre eux étant spécifiquement axé sur l'innovation ($\pm 5\%$)
- Réseau électrique efficace qui permet et soutient la transition énergétique
- Projets non réalisés sans incitant : insécurité, innovation, avantages attendus, budget et planning
- Aussi pour développer la gestion de la demande d'électricité et *consumer centric*
- Primes en fonction des livrables et dépenses réels
- Consultations publiques, comptes rendus, collaborations académiques...
- Depuis 2020, environ 80 % des objectifs atteints avec 30 projets dans le domaine de la gestion de la congestion, de l'intégration *offshore*, de la numérisation...

— CREG —

7

Incitant liés à la transition énergétique pour Fluxys Belgium et Fluxys LNG



— CREG —

Incitant liés à la transition énergétique pour Fluxys Belgium et Fluxys LNG

- Période 2020-'23
 - montant : 3,6 M€ max brut/an
 - incitants favorisant :
 - la réduction des émissions de méthane
 - l'efficacité énergétique
 - les connexions d'installations d'hydrogène, de biogaz et CNG
- Période 2024-'27
 - consultation publique [en cours](#)
 - montant : 5 M€ max brut/an
 - incitants favorisant :
 - la réduction des émissions de méthane et de CO₂
 - l'efficacité énergétique et la production d'énergie verte
 - les investissements « *future proof* »

— CREG —

,

Europe : investir davantage dans les énergies renouvelables et l'hydrogène en particulier

1. COMMUNICATION DE LA COMMISSION EUROPÉENNE SUR **"ENERGY EMERGENCY – PREPARING, PURCHASING AND PROTECTING THE EU TOGETHER"** DU 18 OCTOBRE 2022 : [Propositions supplémentaires pour lutter contre les prix élevés de l'énergie \(europa.eu\)](#)
2. **THE STATE OF THE ENERGY UNION**, DE LA COMMISSION EUROPÉENNE DU 18 OCTOBRE 2022 : [State of the union \(europa.eu\)](#)



— CREG —

Europe : investir davantage dans les énergies renouvelables et l'hydrogène en particulier

Communication de la Commission européenne sur l'*Energy Emergency* :

- une **modification des mesures temporaires de crise en matière d'aides d'État** avant la fin du mois d'octobre afin de donner aux Etats membres davantage de leviers pour soutenir les entreprises
- possibilités d'allouer **jusqu'à 40 milliards € du Fonds de cohésion 2014-2022** à des mesures ciblées de soutien aux citoyens et aux petites entreprises
- une **évaluation de la nécessité d'accélérer les investissements pour la transition énergétique** et d'éviter la fragmentation du marché, suivie d'une proposition visant à augmenter l'efficacité financière du REPowerEU

The State of the Energy Union de la Commission européenne :

- l'Union européenne investira **plus de 21 milliards € dans l'hydrogène dans les prochaines années**
- les constructeurs d'installations d'électrolyse en Europe se sont engagés à **décupler (x10) leur capacité de construction** pour atteindre 17,5 GW d'ici 2025
- création d'une **Banque européenne de l'hydrogène qui investit 3 milliards €** dans le marché de l'hydrogène de l'Union européenne

— **CREG** —

11

CREG



Commission de Régulation de l'Électricité et du Gaz

Hoorzitting: “*De return on investment* van de overheidsfinanciering in het kader van de energietransitie”

COMMISSIE VOOR ENERGIE, LEEFMILIEU EN KLIMAAT

Koen Locquet - Laurent Jacquet

8 november 2022



— CREG —

Commissie voor de Regulering van de Elektriciteit en het Gas

Investeringsen die onder de bevoegdheid van de CREG vallen

1. Subsidies voor *offshore* windenergie in België
2. Stimulans voor innovatie voor Elia
3. Stimulans in verband met energietransitie voor Fluxys Belgium en Fluxys LNG
4. Europa : verder investeren in hernieuwbare energie en waterstof in het bijzonder

— CREG —

2

Subsidies voor *offshore* windenergie in België



— CREG —

De oostelijke zone (2,2 GW)

- 9 *offshore* parken met een vermogen van 2,2 GW:
 - productie 2009-2021 = 35,5 TWh
- Uitbetaalde subsidies 2009-2021:
 - **aankoop GSC & voorschotten: € 3,5 miljard**
 - **uitbetaling kabelsubsidie: € 112,6 miljoen**
- **Kabelsubsidie van M€ 25**
 - uitbetaald na aantonen van vergund investeringsprogramma
 - toegekende subsidies worden effectief gebruikt voor de productie van hernieuwbare energie
- Toekenning van groenestroomcertificaten
 - toegekend per geproduceerde MWh: uitbetaling na controle door de CREG (maand na productie)
 - toegekende subsidies worden effectief gebruikt voor de productie van hernieuwbare energie

— CREG —

Prinses Elisabethzone (3,1-3,5 GW): tendering procedure

- Doel:
 - de hoogst mogelijke injectie van hernieuwbare energie te waarborgen aan de laagst mogelijke kost
- Gunningscriteria:
 - prijs (minimum 70 % volgens regels *State Aid*)
 - innovatie
 - duurzaamheid
- Doel: KB tendering in 2023 uitwerken en aanmelden bij EC voor *State Aid*

— CREG —

Stimulans voor innovatie voor Elia



— CREG —

Stimulans voor innovatie voor Elia

- Innovatie van de CREG in 2016: een deel van de billijke vergoeding van de TNB is voortaan afhankelijk van stimulansen, één daarvan is specifiek gericht op innovatie ($\pm 5\%$)
- Efficiënt elektriciteitsnet dat energietransitie mogelijk maakt en ondersteunt
- Projecten niet uitgevoerd zonder stimulans : onzekerheid, innovatie, verwachte voordelen, budget en planning
- Ook voor ontwikkeling van vraagbeheer elektriciteit en *consumer centric*
- Beloningen volgens werkelijke *deliverables* en uitgaven
- **Publieke raadplegingen, verslagen, academische samenwerkingen,...**
- Sinds 2020, ongeveer 80 % van de doelstellingen behaald met 30 projecten in congestiebeheer, *offshore* **Integratie, digitalisering, ...**

— CREG —

7

Stimulans in verband met energietransitie voor Fluxys Belgium en Fluxys LNG



— CREG —

Stimulans in verband met energietransitie voor Fluxys Belgium en Fluxys LNG

- ♦ Periode 2020-'23
 - **bedrag : max M€ 3,6 bruto/jaar**
 - stimulansen tot bevordering van:
 - minder methaanuitstoot
 - energie-efficiëntie
 - aansluiting van waterstof-, biogas- en CNG-installaties
- ♦ Periode 2024-'27
 - lopende publieke raadpleging
 - **bedrag : max M€ 5 bruto/jaar**
 - stimulansen tot bevordering van:
 - minder methaan- en CO₂-uitstoot
 - energie-efficiëntie en productie van groene energie
 - « *future proof* » investeringen

— CREG —

Europa : verder investeren in hernieuwbare energie en waterstof in het bijzonder

1. **MEDEDELING VAN DE EUROPESE COMMISSIE OVER "ENERGY EMERGENCY – PREPARING, PURCHASING AND PROTECTING THE EU TOGETHER" VAN 18 OKTOBER 2022 : [Aanvullende voorstellen om hoge energieprijzen tegen te gaan \(europa.eu\)](#)**
2. **"THE STATE OF THE ENERGY UNION" VAN DE EUROPESE COMMISSIE VAN 18 OKTOBER 2022 : [State of the union \(europa.eu\)](#)**



— CREG —

Europa : verder investeren in hernieuwbare energie en waterstof in het bijzonder

Mededeling van de Europese Commissie ~~over~~ **"Energy Emergency"** :

- een **amendering van het tijdelijke criskader voor staatssteun vóór het einde van oktober**, om Lidstaten meer hefboomen te geven om bedrijven te steunen
- mogelijkheden om **tot € 40 miljard uit het 2014-2022 cohesiefonds** toe te wijzen aan doelbewuste maatregelen om burgers en kleine ondernemingen te steunen
- een **beoordeling naar de noodzaak om investeringen voor energietransitie te versnellen** en marktfragmentatie te vermijden, gevolgd door een voorstel om de financiële efficiëntie van REPowerEU te vergroten

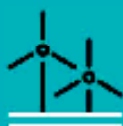
"The state of the energy Union" van de Europese Commissie:

- de Europese Unie investeert **In de komende jaren meer dan € 21 miljard in waterstof**
- de bouwers van elektrolyse-installaties in Europa hebben zich er toe verbonden om hun **capaciteit om deze installatie te bouwen met een tienvoud te verhogen tot 17.5 GW tegen 2025**
- de oprichting van een **Europese Hydrogen Bank die € 3 miljard investeert** in de waterstofmarkt in de Europese Unie

— **CREG** —

11

CREG



Commissie voor de Regulering van de Elektriciteit en het Gas



Accelerating the Climate and Energy Transition in Europe: Investment Support and Subsidies

Sebastian Oberthür

Commissie voor Energie, Leefmilieu en Klimaat,
08 November 2022



UNIVERSITEIT
LEUVEN

Content

1. The European landscape of investment support for the climate and energy transition
2. Key policy frameworks for a coherent and effective approach
3. Key criteria for supporting the transition



The Brussels School of Governance is an alliance between the Institute for European Studies (Vrije Universiteit Brussel) and Vrije Universiteit Brussel.

1. European landscape

- Two principal types of channels of EU (investment) support
 - Direct support
 - Via Member State planning and programming



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1. European landscape

➤ Direct support

- EU Innovation and Modernisation Funds (ETS), EIB, InvestEU, Connecting Europe Facility, Horizon Europe
- Direct application for relevant projects to the different entities (at times, in response to calls)
- Channel/call-specific criteria, requirements, disbursement rules, monitoring and evaluation
- Disbursement in steps, subject to achievement of defined milestones



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1. European landscape

- **Via Member State planning and programming**
 - NextGenerationEU (COVID-19 recovery), Just Transition Fund, Structural Funds, Common Agricultural Policy, Social Climate Fund (under negotiation)
 - Member States elaborate plans and programmes, subject to review (by the European Commission) and approval at EU level
 - Actual implementation and evaluation of projects primarily administered at Member State level
 - General criteria and requirements at EU level, monitoring and evaluation of projects at Member State level



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1. European landscape

➤ Other

- Strategic Energy Technology Plan (SET Plan): coordination of support by Member States
- EU State Aid Guidelines for Climate, Environmental Protection and Energy: rules for Member State subsidies
- Important Projects of Common European Interest: State-Aid clearance and support



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2. Key Frameworks

➤ EU level

- European Green Deal (including REPowerEU)
- European Climate Law: climate neutrality by 2050 and negative emissions thereafter
- EU Long-Term Climate Strategy: overall and per sector
- European Semester (further potential for integration)



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2. Key Frameworks

➤ Member States

➤ National Energy and Climate Plans (NECPs - EU Governance Regulation)

- 10-year time horizon – every 10 years
- To be updated every five years (next: 2023)
- Covering all five dimensions of the Energy Union: decarbonization, energy efficiency, energy security, internal energy market, research-innovation-competitiveness

➤ Long-Term Strategies (EU Governance Regulation)

- 30-year time horizon
- Every ten years, with interim updates possible

⇒ Further integration of dimensions and with economic planning



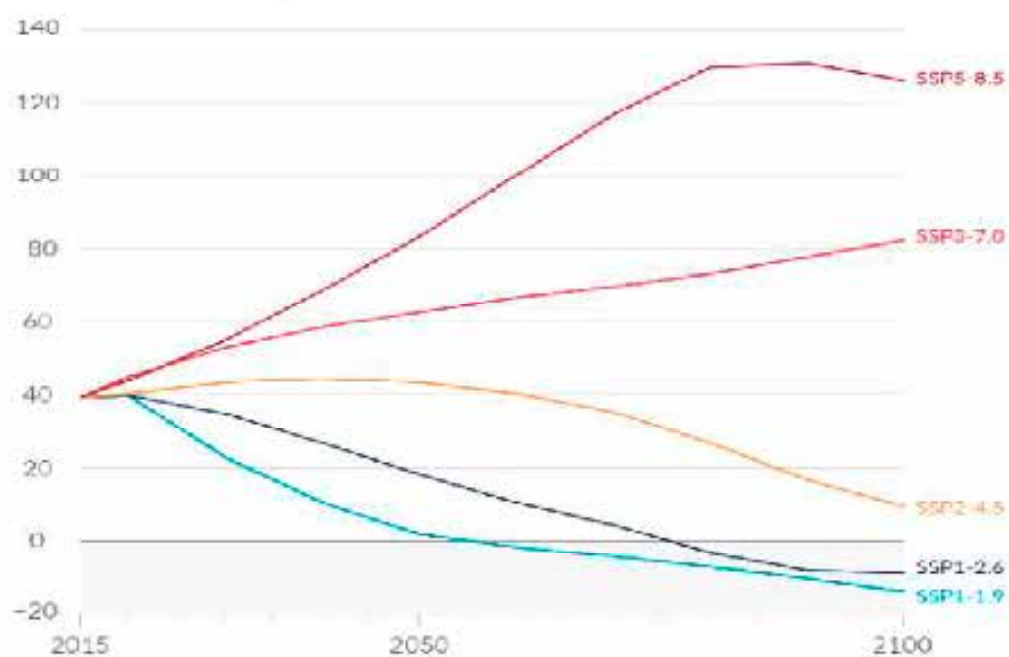
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3. Key Criteria

- The scope and breadth of the climate and energy transition require **going beyond a narrow focus on “return on investment” in terms of immediate emission reductions.**
- Instead, a flexible set of criteria for different types of support is required - taking into account different sectoral conditions, the social/societal dimension of the transition, its long-term nature.
- NECPs and Long-Term Strategies constitute key instruments to that end.



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Carbon dioxide (GtCO₂/yr)

Source: IPCC,
2021 (SPM, WG I)

3. Key Criteria/overarching principles

- **Consistency with the EU's climate objectives in a long-term perspective** (climate neutrality, but also adaptation)
- **No (significant) harm principle**
- **Scope for improvement:**
 - Operationalizing/concretising the above principles (consistency and no-harm), including taking into account different conditions across sectors and cross-sectoral linkages
 - Expanding/broadening their application to all investments and investment support, including at national level
 - Beyond avoiding harm: maximising synergy!



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Looking forward to your questions!

sebastian.oberthuer@vub.be



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Accelerating the Climate and Energy Transition in Europe: Investment Support and Subsidies

Prof. Dr. Sebastian Oberthür

Vrije Universiteit Brussel and University of Eastern Finland

*Hearing of the Commissie voor Energie, Leefmilieu en Klimaat van de
Kamer van volksvertegenwoordigers, 8 November 2022*

This brief note elaborates on three points related to investment support and subsidies for the climate and energy transition in Europe: (1) the existing European landscape for such investment support and subsidies, (2) key frameworks for a consistent and effective approach defined at the EU level, and (3) key criteria for supporting the transition. It is based on the insight that, despite the significant progress made, the climate and energy transition in Europe is still in urgent need to be enormously accelerated in order to realise climate neutrality by 2050 and negative greenhouse gas (GHG) emissions thereafter (IPCC 2021; 2022; EEA 2022).

1. The European landscape for financial support of the climate and energy transition

We can usefully distinguish two main types of channels of EU support and subsidies for the climate and energy transition. First, there are several schemes for direct funding from EU sources. These include the Innovation Fund under the EU's GHG emissions trading system (appr. EUR 35-40 bn for 2020-2030), the Horizon Europe programme for research and innovation (appr. EUR 87 bn for 2021-2027), the InvestEU scheme (EUR 26 bn for 2021-2027), the Connecting Europe Facility (EUR 21 bn for 2021-2027) (all: general EU budget), and the European Investment Bank. Funds are disbursed directly under the relevant programmes and entities (following EU-level rules, monitoring and evaluation).

Second, several schemes make relevant EU funding available through planning and programming of EU Member States. These include the bulk of the NextGenerationEU (post-Covid-19 recovery funding), the Just Transition Fund, EU Structural Funds, the Common Agricultural Policy, the Modernisation Fund under the EU emissions trading system (appr. EUR 50 bn for 2020-2030), and the planned Social Climate Fund (to be resourced by income generated by the newly proposed EU emissions trading covering the buildings and transport sectors). With the exception of the Just Transition, Modernisation and Social Climate Funds, these instruments do not specifically fund the climate and energy transition but are subject to targets for shares of climate funding (general EU budget 2021-27: at least 30%; NextGenerationEU: at least 37%). Implementation generally proceeds on the basis of Member State plans and programmes (subject to EU review/approval of compliance with EU-level criteria and requirements) and is eventually administered by the Member States (including project selection, implementation and evaluation).

In addition, the Strategic Energy Technology (SET) Plan serves to coordinate support across Member States; the EU's State Aid Guidelines for Climate, Environmental Protection and Energy determine how and to what extent Member States can subsidise the transition while stay-

ing in line with Internal Market and competition rules; and the regularly updated list of Important Projects of Common European Interest defines specific projects that can benefit from State Aid and EU support.

The different funding schemes cover the different phases of technological development from basic research (e.g. Horizon Europe) to piloting/demonstration (e.g. Innovation Fund) to actual deployment (e.g. Structural Funds, NextGenerationEU). They also address relevant infrastructure development (e.g. Connecting Europe Facility, Structural Funds) and accompanying social measures (Just Transition Fund, Social Climate Fund).

2. Key European frameworks for consistency and effectiveness

Given the diversity of funding mechanisms and streams, ensuring consistency across them and overall effectiveness in delivering on the climate and energy transition is a key requirement. To this end, a number of central political frameworks exist at both the EU and Member State levels.

At the EU level, the following key frameworks deserve particular mentioning: (1) the 2019 European Green Deal (a strategy of the European Commission under President von der Leyen, also endorsed by EU Member States; European Commission 2019), as further developed in the REPowerEU plan elaborated in response to the Russian invasion of Ukraine (European Commission 2022); (2) the European Climate Law (Regulation 2021/1119) enshrining the EU's goal of achieving climate neutrality by 2050 and negative GHG emissions thereafter; (3) the EU's Long-Term Climate Strategy published in 2018 (European Commission 2018 – possibly to be updated); and (4) the European Semester as the central mechanism for coordination of economic policies across EU Member States. The Sustainable Finance Taxonomy (Regulation 2020/852) has also acquired particular prominence as an attempt to create a label for “green” investments.

At the Member State level, Regulation 2018/1999 on the Governance of the Energy Union and Climate Action (Governance Regulation) has established a consolidated system of national mid- and long-term planning that is also supposed to provide guidance for the prioritization of climate and energy investments. Its two main components are: (1) integrated National Energy and Climate Plans (NECPs) to be drawn up by Member States every ten years with a ten-year time horizon and to be updated every five years (updates of the first NECPs are due by mid-2023) and (2) long-term climate strategies with a 30-year time horizon to be drawn up by Member States every 10 years as well, with the possibility of an update every five years (2024). NECPs address all five dimensions of the Energy Union, i.e. decarbonization (including renewable energy), energy efficiency, energy security, internal energy market, research-innovation-competitiveness. They form, together with long-term strategies, key instruments for the planning of future climate and energy investments. Their potential can be further exploited by enhancing the integration of the different dimensions (e.g. regarding energy security) and the integration with wider economic planning (e.g. in the context of the European Semester process).

3. Key criteria

The climate and energy transition entails a societal and socio-economic transformation of a scope and breadth which require the application of a flexible set of criteria for different types of funding and support. A narrow economic conception of “return on investment” in terms of GHG/CO₂ emission reductions does not appear appropriate for a wide range of key investments

required to enable and realise emission reductions towards climate neutrality in the medium to long term, e.g. into infrastructure, basic research and piloting and demonstration, as well as accompanying measures such as social cushioning of effects of the transition. It would also be in tension with the long-term perspective implied by the EU's climate objectives (climate neutrality and negative emissions, but also related to adaptation), which at times requires early support for solutions that promise to deliver strategic value in the longer term.

Having said that, a couple of general principles of EU climate and energy governance under the European Green Deal have emerged. First, the 2021 European Climate Law makes future policies and measures subject to a check for consistency with the EU's long-term climate objectives and also requires the European Commission to regularly undertake a related consistency check of related national measures (Articles 6 and 7). Furthermore, the “do no (significant) harm principle” (first established in the European Green Deal) has acquired increasing prominence in EU policy development and investment support. Beyond the European Green Deal strategy, the principle has been included in selected pieces of relevant EU legislation (e.g., including rules guiding NextGenerationEU funding).

These emerging principles and criteria leave significant room for further development and improvement. Both the criterion of consistency with the EU's long-term climate objectives and the no-significant-harm principle require further operationalization and concretisation. To this end, varying technological and socioeconomic conditions in different sectors (barriers and drivers) and cross-sectoral linkages and trade-offs, which have been increasingly in focus in recent research and policymaking on the climate and energy transition (e.g. Victor et al. 2019; IPCC 2022; Climate Action Pathways). Both principles are also currently primarily pursued at the EU level and even there to a still limited extent. To fully support the climate and energy transition, their application should be extended to all relevant policies at the EU level and to Member State-level decision-making. To this end, they could be further elaborated and anchored in European law in a revision of the European Climate Law and/or the Governance Regulation foreseen for 2024 – but they can and should be further applied at national level immediately. Finally, a focus on avoiding harm and ensuring consistency may not fully grasp the potential of various policies for synergy with climate objectives. It might be worth establishing the goal of maximising such synergy.

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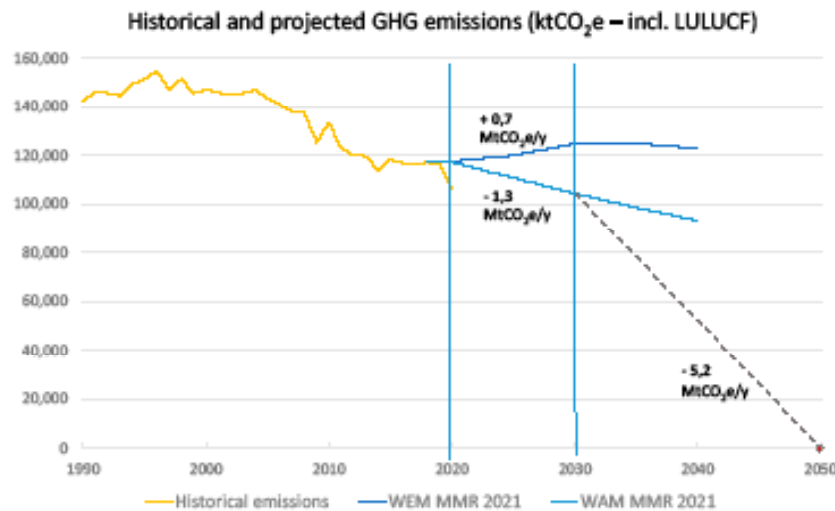
Diego. Available at www.energy-transitions.org/sites/default/files/Accelerating-The-Transitions_Report.pdf



OUTLINE

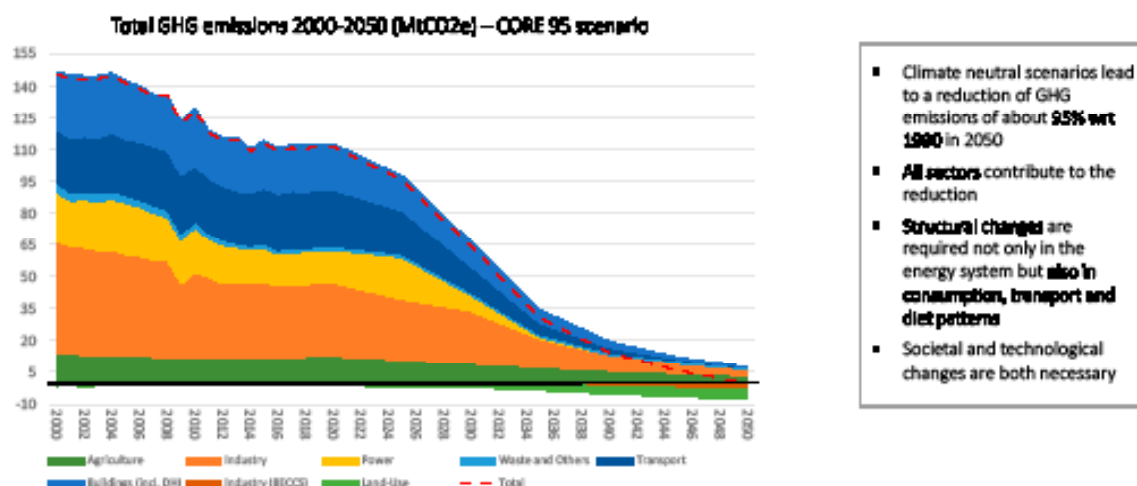
1. Climate neutrality requires a drastic change in investment patterns
2. The transition leads to large societal returns
3. The fiscal system needs to evolve
4. Federal climate policies need to be adequately monitored and financed

GHG EMISSIONS NEED TO DECREASE AT A MUCH HIGHER PACE TO REACH NET-ZERO BY 2050

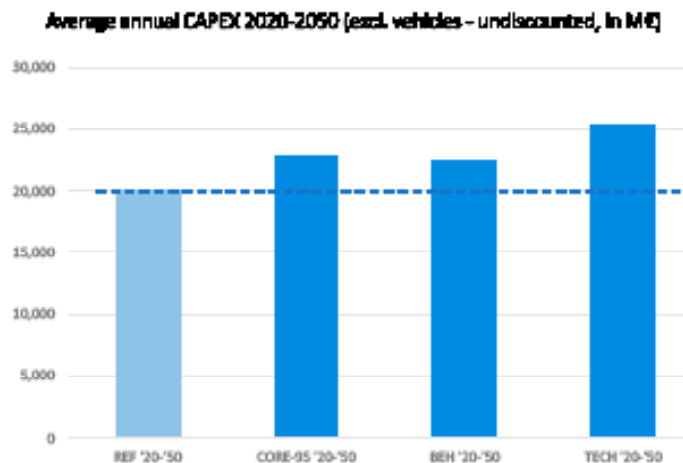


Source: NIR 2022, MMR 2021, PNEC ⁴

IT IS TECHNICALLY FEASIBLE TO REACH CLIMATE NEUTRALITY BY 2050 IN BELGIUM AND SEVERAL TRAJECTORIES CAN BE PURSUED



DECARBONISATION REQUIRES ADDITIONAL CARBON-FRIENDLY INVESTMENTS IN INFRASTRUCTURE IN ALL SECTORS



Note: CAPEX absolute levels strongly depend on their scope in each sector

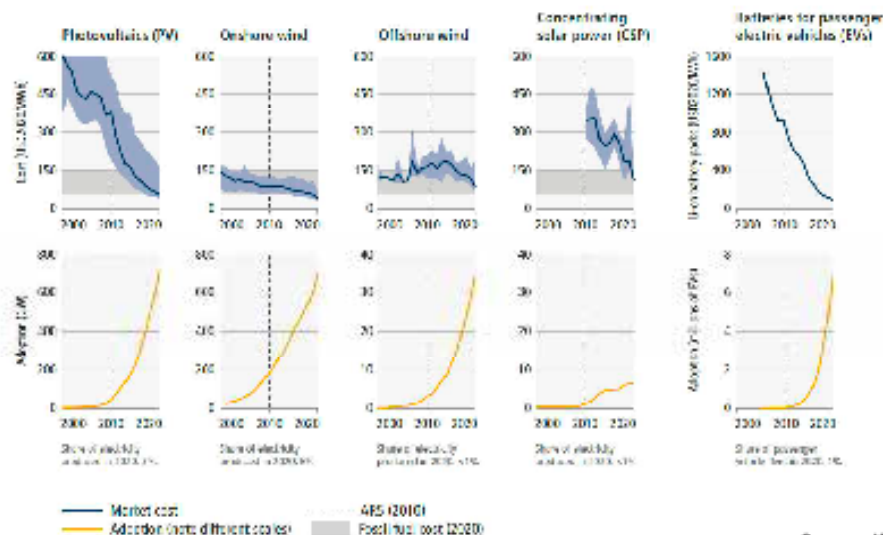
- When not taking into account expenditures related to road vehicles, **CAPEX increase in all scenarios** when compared to the REF scenario (between 12 to 26%).
- When taking **road vehicle CAPEX** into account, CAPEX are lower in some scenarios, due to the drastically lower amount of vehicles required in these scenarios
- Total CAPEX can be significantly reduced when the demand for the related energy services is reduced through **behavioural changes and circular economy** levers.
- **OPEX generally follow the CAPEX** evolutions in each sector – but higher electrification levels allow to save on OPEX when compared to conventional technologies

OUTLINE

1. Climate neutrality requires a drastic change in investment patterns
- 2. The transition leads to large societal returns**
3. The fiscal system needs to evolve
4. Federal climate policies need to be adequately monitored and financed

THE COST OF RENEWABLE TECHNOLOGIES HAS DECLINED DRASTICALLY

Unit cost and deployment of a selection of renewable technologies (2000-2020)

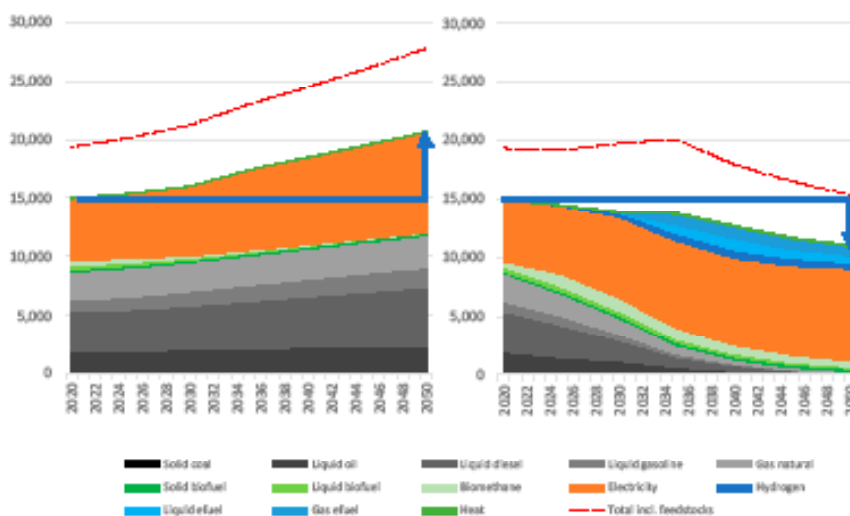


Source: IPCC AR6 – WGIII

#1 ENERGY SAVINGS AND ENERGY SECURITY OPPORTUNITY

Fuel cost reductions tend to offset CAPEX increases

Evolution of fuel costs in the REF (left) and CORE (right) scenario (2020-2050, in M€)

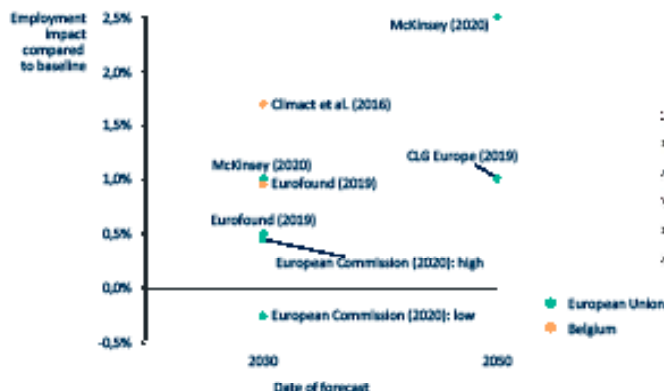


- Under standard energy price assumptions, fuel costs tend to be lower in all illustrative scenarios when compared with the REF scenario
- Overall, total energy system costs tend to be lower under climate-neutral scenarios when compared with the REF scenario, both excluding and including CAPEX and OPEX related to road vehicles
- Key for the evolution of energy costs:
 - The role of behavioural, cultural changes and the sharing/circular economy
 - H2 & e-fuel consumption levels and prices

#2 EMPLOYMENT OPPORTUNITY

Limited but positive employment impact

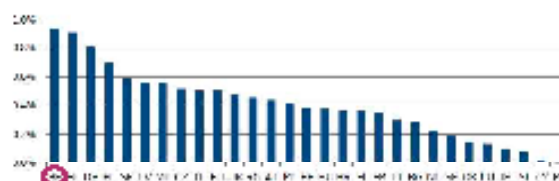
Employment impact of the low carbon transition according to key studies
[In EU and Belgium, by 2030 and 2050, % difference from baseline]



SOURCES: McKinsey (2020), Climact et al. (2016), CLG Europe (2019), Eurofound (2019), European Commission (2020)

Belgium is the EU country with potentially highest gains

Employment impact of the low carbon transition in EU countries
[by 2030, % difference from baseline]

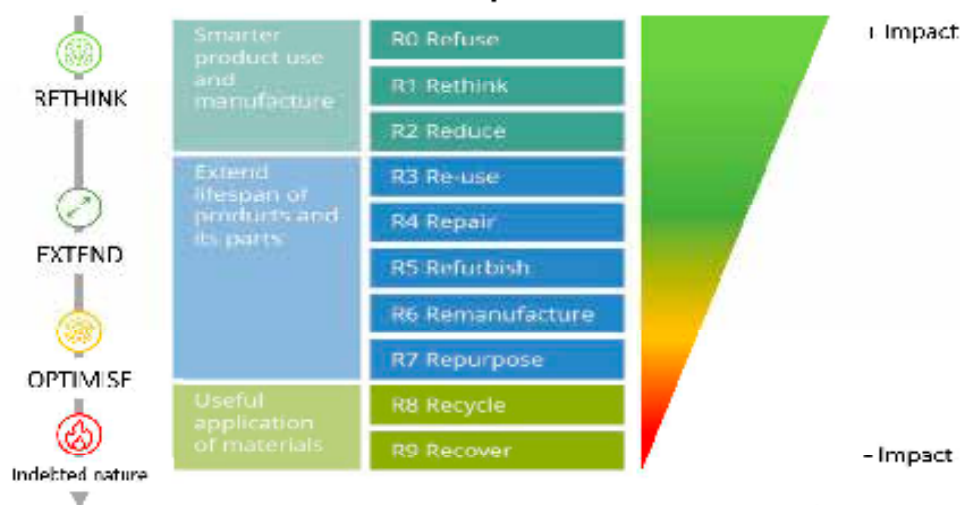


SOURCE: Eurofound (2019)

#3 NEW BUSINESS MODELS

The circular and biobased economy offers the opportunity to develop completely new consumption and production models

The 10 R's Hierarchy

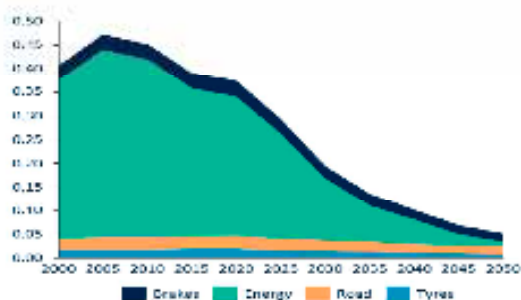


Source: Y. De Rongé (UCLouvain), 2022

#4 HEALTH BENEFITS

Decarbonisation leads to drastic reductions of air pollutant emissions by 2050 in both the buildings (-95% for PM2.5) and the transport sectors (-88%)

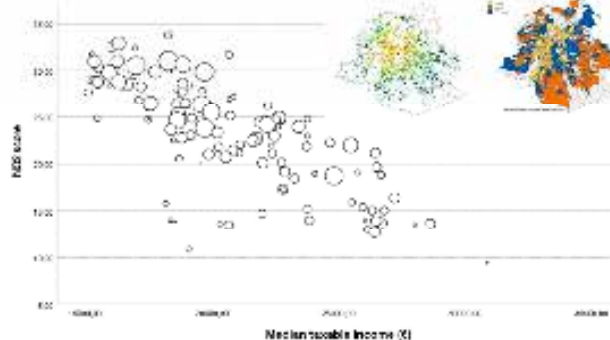
Transport PM2.5 emissions – CORE 95 scenario



Source: Climact, 2021

Air quality in Brussels is correlated to income and car ownership

Air pollution (NO2) vs taxable income in Brussels

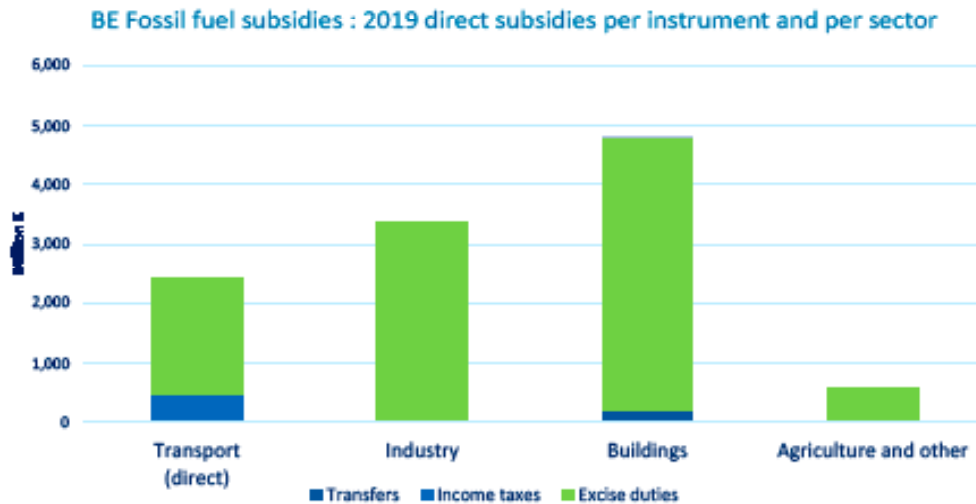


Source: Curieuzenair, 2022

OUTLINE

1. Climate neutrality requires a drastic change in investment patterns
2. The transition leads to large societal returns
- 3. The fiscal system needs to evolve**
4. Federal climate policies need to be adequately monitored and financed

SIGNIFICANT FOSSIL FUEL SUBSIDIES IN ALL SECTORS IN BELGIUM

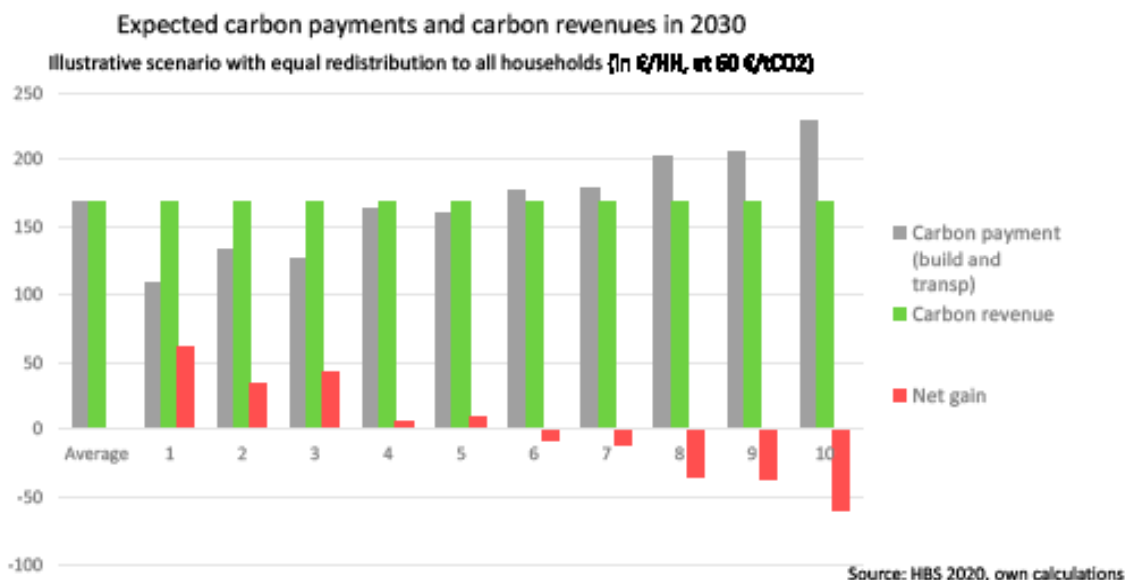


Source: Inventory of fossil fuels subsidies (2021)

SOME RECENT DEVELOPMENTS AT EU AND BELGIAN LEVELS

- **Energy taxation directive** under discussion : progressive phasing out of fossil fuel subsidies
- **Carbon price** for buildings and road transport (ETS BRT) under discussion: pricing of carbon emission before 2030 and associated public revenues
- **Minister of Finance blueprint on the fiscal reform**: includes
 - « *Nous stimulons le secteur des transports à l'innovation durable en réduisant progressivement l'avantage du diesel professionnel.* »
 - « *Nous consacrons l'innovation pour l'indemnité vélo et le taux de TVA réduit pour les vélos partagés.* » « *Nous réduisons à 0 % le taux de TVA pour [...] le transport de personnes organisé et subventionné par les pouvoirs publics.* »
 - « *Onze fiscaliteit houdt momenteel onvoldoende rekening met de maatschappelijke kosten verbonden aan CO₂-uitstoot. Daarom voeren we gradueel een CO₂-heffing in voor die domeinen die niet onder het Europees emissiehandelssysteem vallen.* »
 - « *We moeten onze kwetsbare gezinnen begeleiden en ondersteunen in de omslag naar een meer duurzame samenleving. Dit doen we aan de hand van een ecobelastingkrediet gefinancierd door de CO₂-heffing.* »
 - ...
- **Fiscal adjustments in the context of the current energy prices crisis**

LUMP-SUM REDISTRIBUTION OF THE REVENUES GENERATES A PROGRESSIVE INCOME EFFECT



OUTLINE

1. Climate neutrality requires a drastic change in investment patterns
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3. The fiscal system needs to evolve
- 4. Federal climate policies need to be adequately monitored and financed**

KEY MESSAGES

1. Current investments are a **very small fraction** of what is needed in the coming 30 years
2. At **societal level**, these investments are **profitable**, even when the avoided climate change costs are not accounted for
3. At private –household or company- level, these are however not always be profitable; supporting and/or **compensating measures** are key, especillay for energy poor households and for companies at risk of any distortive competition
4. The majority of private investements cannot be incentivised **by** ‘supporting’ measures; **price signals** in favour of decarbonised options need to play a role; **subsidies** will need to be targeted, e.g. to support the development of **technological and social niches**
5. Federal climate policies need to be **adequately financed** ; need to build up on the **new governance framework**

THANK YOU!

vincent.vandecasteele@health.belgium.be



Energy Transition Fund

8 November 2022

Context & scope ETF

Context ETF



- **ETF secretariat** operational since 2016: FPS Economy (DG Energy)
- **Mission ETF:**
 - to encourage and support research, development and innovation in the field of energy transition – within the federal energy competences of Belgium.
 - to ensure more concrete R&D output for policy makers as well as possible further commercialization of innovative technologies and concrete investments that can add value to the energy transition of our country.
- **Yearly ETF calls** for innovative energy R&D projects are organized (2017-2021), with [84 selected and supported projects](#) since 2017.
- Federal government **coalition agreement**: *"The Energy Transition Fund is used as a priority for innovative projects that fit within the sustainable energy transition and that really contribute to the reduction of greenhouse gas emissions and the transition to renewable energy."*

Legal context

- The Energy Transition Fund was **created by article 4ter of the law of 29 April 1999** on the organization of the electricity market (law containing various provisions of 28 June 2015).
- **Allocated revenue of the fund** = annual compensation of 20 million euros in exchange for extension D1 and D2 (Article 4ter E-Law, the Organic Law of 27 December 1990 establishing budget funds, heading 32-24 and the Law of 31 January 2003, article 4/2)
- **Authorized expenses of the fund (Organic Law of December 27, 1990):** *"The fund aims to finance measures to stimulate and support research and development in innovative projects within the energy domain within the framework of the competences of the federal state, and to finance measures for the conservation and/or development of and/or examining a system to ensure security of supply and grid balance, in particular in relation to energy production and storage, as well as demand management."*
- **Royal Decree of 9 May 2017** establishing the terms of use of the Energy Transition Fund determines the functioning of the Energy Transition Fund.

Main thematic axes



AXIS 1 - Renewable energy sources in the North Sea and biofuels



AXIS 2 — Nuclear energy applications



AXIS 3 - Security of supply and balance of the transmission system

Type of supported activities (Regulation (EU) 2014/651)

Energy R&D projects (art. 25)



- **Fundamental research** (TRL1 => 100% aid intensity)
- **Feasibility study** (TRL2 => 50% aid intensity)
- **Industrial research** (TRL3/4/5 => 50% aid intensity)
- **Experimental development** (TRL6/7 => 25% aid intensity)



Investment aid for research infrastructure (art. 26)



Innovation aid for SMEs (art. 28)

ETF cycle & procedure

Overview ETF cycle (e.g. call November 2021)

Launch project call & submission of proposals

- **15 November 2021 (at the latest):** launch of the call & communication (web page ETF, Belgian Official Journal, social media,...)
- **December 2021:** pre-notification by candidates of submission of project proposals
- **January 2022:** submission of final project proposals

Evaluation & decision

- **February – April 2022:** evaluation of submitted project proposals (*see next slide for details*)
- **30 April 2022 (at the latest):** formal opinion of DG Energy to the Minister of Energy
- **31 May 2022:** decision of the Council of federal Ministers to grant a support by Royal Decree

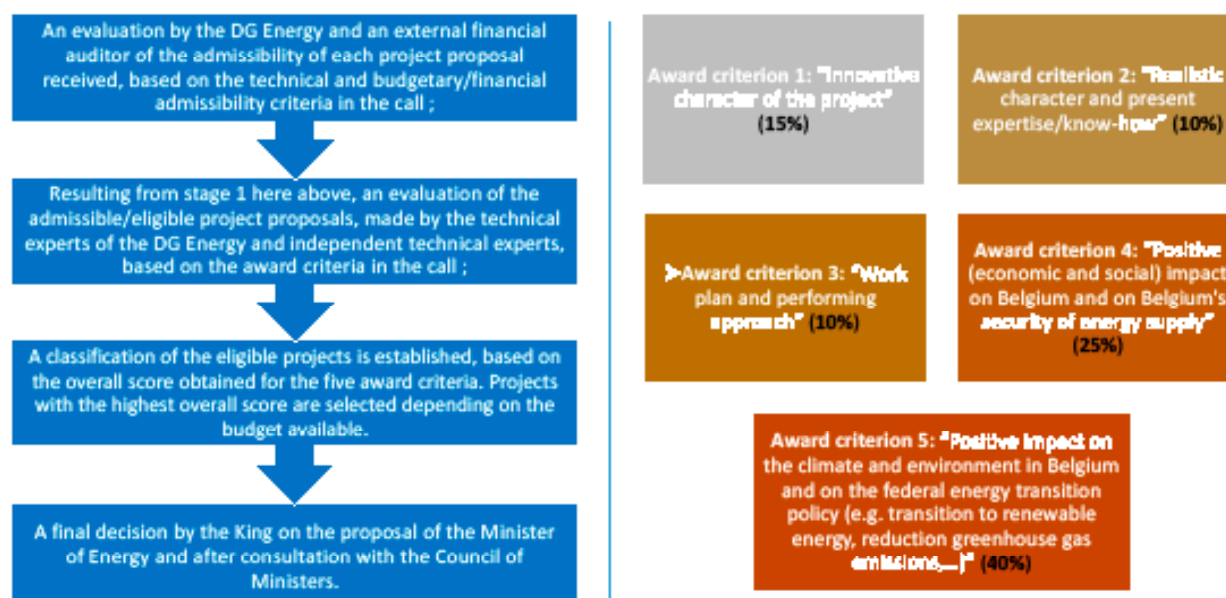
Implementation decision & follow-up

- **June 2022:** Formal communication of results to all candidates & subsidy decrees
- **July – September 2022:** Conclude subsidy contract for each selected project
- **September – November 2022:** Start of selected projects & kick-off meeting for each project
- **2022-2025:** Yearly follow-up of projects for the entire duration (*see next slide for details*)

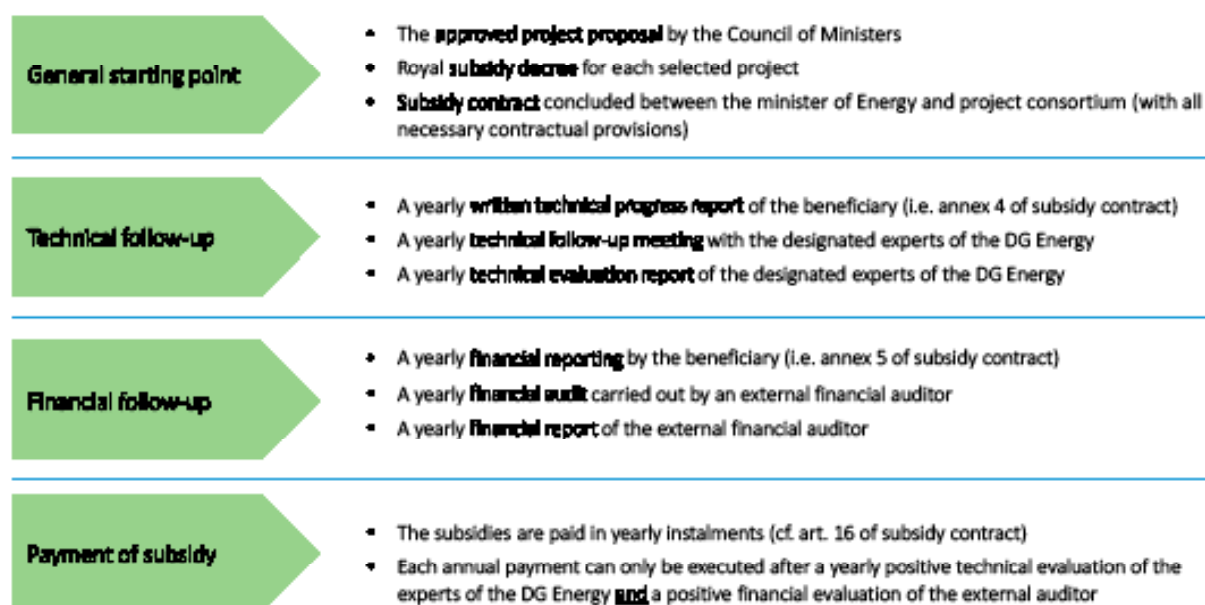
Finalisation & dissemination of public results

- **2023-2025:** Finalisation project (depending on duration / maximal duration = 3 years)
- **2023-2025:** Project consortia publish results (also reference on [webpage ETF](#)).

Procedure evaluation submitted proposals (previous call '21)

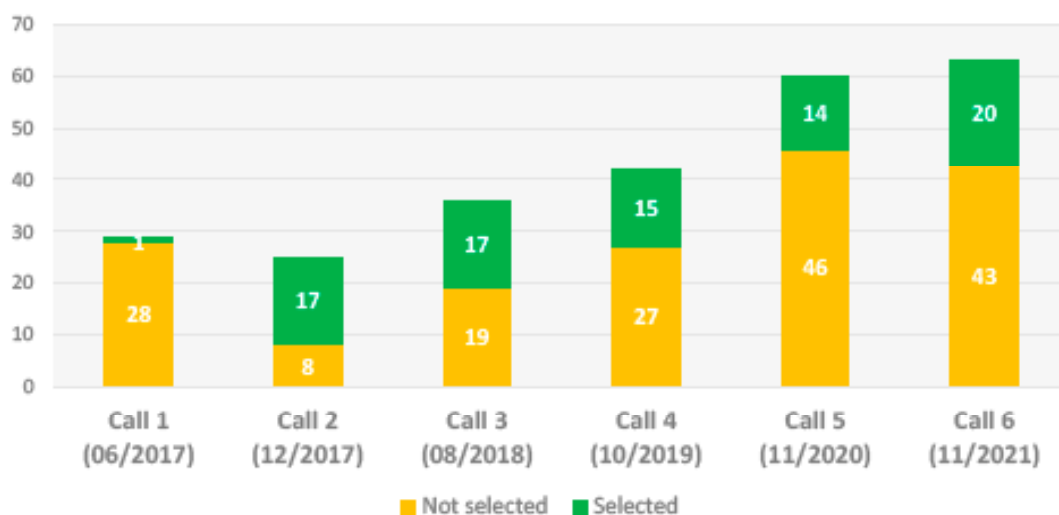


Follow-up & monitoring of selected projects



Overview previous ETF calls

ETF project calls (2017-2021)



Project selection per thematic axis (calls 2017-2021)

- [84 selected and supported projects](#) in the six calls of the Energy Transition Fund (2017-2021)
- Total allocated budget (2017-2021): 128 mio EUR
- Repartition of the 84 selected projects per call & axis:

	06/2017	12/2017	08/2018	10/2019	11/2020	11/2021
Thematic axis 1: Renewable energy sources in the North Sea & biofuels	0	5	6	4	7	7
Thematic axis 2: Nuclear energy applications	0	8	5	9	0	0
Thematic axis 3: Security of supply and balance of the transmission system	1	4	6	2	7	13
	1	17	17	15	14	20

Most recent ETF-call (11/2021)

- Launched on 10 November 2021
- Call addressed to Belgian/EU legal persons
- Support granted per project was min. 100.000 and max. 5 million euro
- 63 innovative project proposals received
- Decision Council of Ministers on 10 June 2022: selection of 20 projects
- Total allocated budget: 24.536.176,05 EUR (excl. 250.000 EUR yearly operating costs)
- [Overview & description of the selected projects \(webpage ETF\)](#)
- More partnerships between governments, universities, research institutes, industrial partners, SMEs, etc. on research, development and innovation in the context of the energy transition.
- More cross-pollination and dissemination of concrete research results and efficient cooperation between all stakeholders involved in Belgium and the EU.

20 newly selected projects (June 2022)

- | | |
|---------------|------------------|
| • BASF VSP | • H2Be |
| • BeFORE-CAST | • H2IC Brazil |
| • BLEEPID | • Harsh-R&D-test |
| • CIREC | • HOH2test |
| • CO2MBS | • HyPACT |
| • DIRECTIONS | • Hy-Source |
| • DISPELEC | • MuSE |
| • ECOFLEX | • NOHENTRY |
| • EcoMPV | • SAGE-SAND |
| • FLEX-CHP | • Sea2-Socket |

Start & kick-off meetings: sept-dec 2022

Next project call – 10 November 2022



A NEW CALL FOR PROJECTS WILL BE
LAUNCHED ON 10 NOVEMBER 2022!



MORE INFO: [WEBPAGE FTE](https://www.economie.fgov.be/en/themes/energie/energie-transitie/energie-transitiefondus) AND
FTE.FTE@ECONOMIE.FGOV.BE.



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